Homework 9

S1260027

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Q1.Define the following terms.

1. database system

database is computer system which enable provision of information.

1. DBMS

DBMS is a software which manage database and operate the database from outside software.

1. DBA

Coordinate all the activities of the database system

1. Integration

Data integration is a process in which heterogeneous data is retrieved and combined as an incorporated and structure.

1. Integrity

Integrity is high level correctness conditions

1. Persistent data

Persistent data are very rarely modified.

1. Redundancy

Data redundancy is the existence of data that is additional to the actual data and permit correction of error in stored or transmitted data.

Q2.What is the difference between the following terms.

1. Base Relation and derived relation.

Base relation is what most refer to as a table.

Derived relation is more commonly known as view. Or more specifically, a table that is derived from other relation

1. Base relation and view.

Base relation actually contains data.

View is a query over one or more base relation but does not actually contain any data itself

1. Derived relation and view.

view can be defined by an expression using the operation of the relational algebra or calculus

1. Degree of a relation and cardinality of the relation.

Degree of a relation is the number of entities that participate in a relationship.

Cardinality of a relation is the minimum and maximum number of occurrences of one entity that may be related to single occurer of another entity.

Q3.Write 4 properties of relations.

1. No duplicate table
2. Tuples have no order
3. Attributes have no order
4. All attribute value are atomic